

Unlabeled 14D

JOINT MESSAGEFORM

SPACE BELOW RESERVED FOR IDENTIFICATION CENTER

LXV

ACTION INFO	PRECEDENCE	TYPE MESSAGE			ACCOUNTING SYMBOL	ORIG. OR REFERS TO	CLASSIFICATION OF REFERENCE
		BOOK	MAIL	MESSAGE			

FROM: 6595th AEROSPACE TEST WING
VANDENBERG AFB, CALIF., VWZD

TO: SPACE SYSTEMS DIVISION, LOSA, CALIF.

Subj: EIGHT HOUR FLASH REPORT

I. SUMMARY 12-6-266

A VEHICLE CONSISTING OF SLV-2A BOOSTER NO. 362 AND S-01A ORBITAL STAGE NO. 1161 WAS LAUNCHED ON THE SECOND ATTEMPT FROM VAFB COMPLEX 75-3, PAD 4, AT 1658:38.03 PDT, ON 12 JUNE 1963. THE PRIMARY LAUNCH OBJECTIVE, TO PLACE THE S-01A SATELLITE WITH PAYLOAD IN A NEAR-POLAR ORBIT, WAS ACCOMPLISHED. BOTH GROUND GUIDANCE TRAJECTORY EVALUATION AND THE REPORTED FIRST PASS ORBITAL PARAMETERS CONFIRM THAT NEAR NOMINAL TRAJECTORY CONDITIONS EXISTED AT S-01A ENGINE SHUTDOWN. CONTROL GAS CONSUMPTION WAS EXCESSIVE DURING THE S-01A THRUST INTERVAL.

DATE 12	TIME F 1658
MONTH JUN	YEAR 63

SYMBOL		SIGNATURE	
TYPED NAME AND TITLE (If required) F. L. WRIGHT MAJ. USAF		TYPED (If required) NAME AND TITLE	
PHONE 66613244	PLATE F	DOWNGRADED AT 3 YEAR INTERVAL DECLASSIFIED AFTER 12 YEARS DOD DIRECTIVE 5200.10	
SECURITY CLASSIFICATION			

2. SIGNIFICANT EVENTS

PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS

ARE:

LIFT OFF (14:58:38.03 EDT)	ZERO
WEB BURST ON SOLID MOTORS	27.25 SEC
SOLID MOTOR THRUST TERMINATION	39 SEC
SOLID MOTOR SEPARATION SIGNAL	70.69 SEC
SOLID MOTOR JETTISON	70.72 SEC
STEERING INITIATED	92.52 SEC
WIND-UP	140.15 SEC
TRIP	157.08 SEC
SEPARATION COMMAND (S-2)	161.70 SEC
SEPARATION COMPLETE	164.09 SEC
WILLAGE ROCKET IGNITION	166.03 SEC
S-01A ENGINE IGNITION	169.04 SEC
S-01A THRUST ATTAINMENT (90 PER CENT FC)	170.22 SEC
BEGIN S-01A STEERING	180.52 SEC
END S-01A STEERING	360.91 SEC
END S-01A VELOCITY METER	362.38 SEC
S-01A ENGINE SHUTDOWN (VELOCITY METER)	411.15 SEC

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DD FORM 13-1

U.S. GOVERNMENT PRINTING OFFICE: 1965 O-350-000

FORM

VTS VERLORT RADAR FINAL LOSS: 413 SEC
VTS TELEMETRY DATA FARE SLINK 1) 454 SEC
VTS TELEMETRY SIGNAL STRENGTH 460 SEC
FARE (LINK 2)
VTS TELEMETRY SIGNAL STRENGTH 468 SEC
FARE (LINK 3)
VTS TELEMETRY SIGNAL STRENGTH 468 SEC
FARE (LINK 4)

III. SLV-2A PERFORMANCE

ALL SLV-2A SUBSYSTEMS PERFORMED ADEQUATELY FOR ACHIEVEMENT OF THE PRIMARY TEST OBJECTIVES.

IV. COMMAND GUIDANCE

PERFORMANCE OF THE COMMAND GUIDANCE SYSTEM WAS

SATISFACTORY. QUICK-LOOK EVALUATION OF INJECTION

CONVERSION AND ORBITAL PARAMETERS AT GUIDANCE

TERMINATION PROVIDED AN INJECTION ALTITUDE OF

115.45 NM (NOMINAL: 109.45 NM), INJECTION FLIGHT PATH

ANGLE OF PLUS 0.35 DEG (NOMINAL: PLUS 0.12 DEG),

ORBITAL PERIOD OF 90.70 MIN (NOMINAL: 90.89 MIN), AND

INCLINATION ANGLE OF 51.59 DEG (NOMINAL: 51.40 DEG).

ORBITAL PARAMETERS REPORTED AFTER REV 1 ARE:

PERIGEE ALTITUDE OF 109 NM (NOMINAL: 115.10 NM),

APOGEE ALTITUDE OF 241 NM (NOMINAL: 237.90 NM).

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ECCENTRICITY OF 0.0024 (NOMINAL: 0.0077), PERIOD OF 90.34 MIN (NOMINAL: 90.34 MIN), AND INCLINATION ANGLE OF 81.39 DEG (NOMINAL: 81.80 DEG).

V. S-SIA PERFORMANCE

ALL S-SIA VEHICLE SUBSYSTEMS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE ADEQUATE ORBITAL INJECTION CONDITIONS AT ENGINE SHUTDOWN. CONTROL GAS CONSUMPTION WAS EXCESSIVE DURING THE THRUST INTERVAL. TOTAL GAS CONSUMPTION THROUGH SIGNAL FADE WAS APPROXIMATELY 15 LBS., 14 LBS. OF WHICH WERE EXPENDED DURING ENGINE BURN. GAS VALVE ACTIVITY, AND A 3.4 DEG OFFSET IN ROLL GYRO OFFSET ARE INDICATIVE OF THE PRESENCE OF A SIGNIFICANT EXTRANEIOUS ROLL TORQUE DURING THE THRUST INTERVAL. AT THE TIME OF TELEMETRY SIGNAL FADE AT 77S, THE ORBITAL TIMER WAS SET AT 5454 SEC (STEP 249) IN THE RESET-ON POSITION, IN THE INCREASE MODE, AND ALTERNATE RE-ENTRY DEARM STATE.

VI. SPACE-GROUND COMMUNICATIONS

TELEMETRY DATA FROM ALL LINKS WERE SATISFACTORILY RECEIVED AND RECORDED.

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THE VERBORT RADAR EXPERIENCED DIFFICULTY IN MAINTAINING CONTINUOUS TRACK OF THE VEHICLE DUE TO WEAK SIGNAL STRENGTH RETURN FROM THE S-BAND BEACON. INTERMITTENT TRACK STARTED AT 265 SEC WITH 6 PERIODS OF TARGET LOSS RANGING FROM 2 TO 20 SEC. DURATION EACH. FINAL SIGNAL LOSS OCCURRED AT 413 SEC AT AN ANTENNA ELEVATION ANGLE OF 2 DEGREES. NO EXTRACORREL RADAR INTERFERENCE WAS EXPERIENCED.

VII. COUNTDOWN

LAUNCH WAS ACCOMPLISHED ON THE SECOND ATTEMPT. THE FIRST COUNTDOWN WAS DELAYED AT 0630 PDT ON 11 JUNE 1963 AND WAS CANCELLED IN TERMINAL COUNT AT 1300 PST DUE TO A PROBLEM ENCOUNTERED DURING SLV-2A ENGINE SLEW CHECKS.

THE FINAL COUNTDOWN WAS INITIATED AT 0800 PDT ON 12 JUNE 1963 AND PROCEEDED TO LIFTOFF WITH NO HOLDS IMPOSED. WORK ON SOME TASKS WAS ABBREVIATED BECAUSE THE VEHICLE WAS PLACED IN A LAUNCH STATUS ON THE PREVIOUS DAY. IN TASK 10 THERE WAS A 10 MIN DELAY DUE TO CONFLICT WITH ANOTHER OPERATION AT PALC 1. TASKS 14 AND 15 WERE DELETED BECAUSE THE

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ORBITAL STAGE HAD BEEN TANKED DURING THE PREVIOUS COUNTDOWN.

VII. AEROSPACE GROUND EQUIPMENT (AGE)

THE AEROSPACE GROUND EQUIPMENT PERFORMED SATISFACTORILY TO SUPPORT CHECKOUT AND LAUNCH OF THE VEHICLE. THE FOLLOWING PROBLEMS WERE ENCOUNTERED:

1. THE AIR CONDITIONING EQUIPMENT DID NOT MAINTAIN PAYLOAD BLANKET TEMPERATURE WITHIN TOLERANCE.
2. ONE AGE NITROGEN PRESSURE TRANSDUCER MALFUNCTIONED.
3. TWO GAS PRESSURE REGULATORS ON THE MANT REQUIRED REPEATED RESETTING.

IX. PAD DAMAGE

PAD DAMAGE WAS NORMAL. REHABILITATION CAN BE ACCOMPLISHED WITHIN THE TURNAROUND SCHEDULE.

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